ACKNOWLEDGMENT OF COMPLETION REPORT

FOR

SECTION 32 URANIUM MINE SITE DRS GRANTS, McKINLEY COUNTY, NEW MEXICO

Prepared for

U.S. Environmental Protection Agency

Linda Carter, Project Officer 1445 Ross Avenue Dallas, Texas 75202

Contract No. EP-W-06-042 TDD No. TO-0035-11-09-03 W.O. No. 20406.012.035.0674.01 NRC No. N/A CERCLIS No. NMN000607184 FPN N/A EPA SAM: Lisa Price START-3 PTL: Patrick Buster

Prepared by

Weston Solutions, Inc.

Robert Beck, VP, P.E., Program Manager 70 NE Loop 410, Suite 600 San Antonio, Texas 78216 (210) 308-4300

28 June 2012

CERCLIS ID: NMN000607184

ACKNOWLEDGMENT OF COMPLETION REPORT

1. PROJECT IDENTIFICATION

Date: 28 June 2012

To: Lisa Price, Site Assessment Manager (SAM)

U.S. Environmental Protection Agency (EPA) Region 6, Prevention and Response Branch

Through: Linda Carter, Project Officer (PO)

EPA Region 6, Program Management Branch

Through: Robert Beck, VP, P.E., Weston Solutions, Inc. (WESTON_®)

EPA Region 6, Superfund Technical Assessment and Response Team (START-3)

Program Manager

From: Patrick Buster, WESTON

EPA Region 6, START-3 Project Team Leader

Subject: Acknowledgment of Completion Report: Section 32 Uranium Mine Site DRS

Grants, McKinley County, New Mexico

Contract No. EP-W-06-042 TDD No. TO-0035-11-09-03 W.O. No. 20406.012.035.0674.01

NRC No. N/A FPN N/A

CERCLIS No. NMN000607184

Activities for this Technical Direction Document (TDD) were associated with investigating mine water discharge locations, sampling potentially impacted soil, sampling surface water, and sampling accessible groundwater wells in the area of the Section 32 Uranium Mine Site Documented Release Sampling (DRS) in Grants, McKinley County, New Mexico. The EPA Region 6, Superfund Technical Assessment and Response Team (START-3) contractor, Weston Solutions, Inc. (WESTON), was tasked to provide technical assistance in this investigation under TDD No. TO-0035-11-09-03, included as Attachment A. The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) number assigned to this site is NMN000607184.

CERCLIS ID: NMN000607184

2. SUMMARY OF ACTIONS

On 30 September 2011, the U.S. Environmental Protection Agency (EPA) Region 6 tasked START-3 to begin planning elemental uranium and radionuclide investigation activities for the Section 32 Uranium Mine Site DRS Project (the site). START-3 participated in a project kick-off meeting with EPA Site Assessment Manager (SAM) Lisa Price in September 2011 to discuss the scope of the TDD. U.S. EPA provided a mining inspection report of the Section 32 Uranium Mine Site DRS conducted on behalf of the New Mexico Department of Environment, along with well information documents for review and background information. Prior to START-3 moving forward with the investigation activities, EPA SAM Price tasked the U.S. EPA Airborne Spectral Environmental Collection Technology System (ASPECT) aircraft team with performing reconnaissance of the Section 32 Uranium Mine Site DRS for identification of potential hazardous materials on-site.

The ASPECT aircraft conducted an overflight of the Section 32 Uranium Mine Site DRS on 23 August 2011. According to a U.S. EPA Superfund Site Strategy Recommendation Report, the results from the ASPECT overflight indicated that gamma radiation readings found at the site were statistically greater than background readings in the area.

On 13 December 2011, EPA SAM Price determined that the START-3 investigation was not warranted at the Section 32 Uranium Mine Site DRS at this time due to New Mexico having regulatory jurisdiction for releases at the mine site. START-3 was directed by EPA SAM Price to discontinue all work associated with the Section 32 Uranium Mine Site DRS under TDD No. TO-0035-11-09-03 in December 2011.

This final report was prepared as part of the requirements of the Technical Direction Document (TDD) No. TO-0035-11-09-03 and serves as documentation of work completed to date.

CERCLIS ID: NMN000607184

3. LIST OF ATTACHMENTS

A. TD	D No. TO-0035-11-09-03 and Amendments A - C
	The EPA Task Monitor did not provide final approval of this report prior to the completion date of the work assignment. Therefore, Weston Solutions, Inc. has submitted this report absent the Task Monitor's approval.
X	The EPA Task Monitor has provided final approval of this report. Therefore, Weston Solutions, Inc. has submitted this report with the Task Monitor's approval.

ATTACHMENT A TDD NO. TO-0035-11-09-03 AND AMENDMENTS A - C

START3 Technical Direction Document

TDD #: TO-0035-11-09-03 Contract: EP-W-06-042

Assessment/Inspection Activities -Enforcement Funds (0035) Weston Solutions, Inc.

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TDD Name:	Section 32 Uranium Mine C	PRS ! Period:	Base Period
! Purpose:	Work Assignment Initiation		
! Priority:	High	! Start Date:	09/30/2011
Overtime:	Yes	! Completion Date:	06/29/2012
! Funding Category:	Removal	Invoice Unit:	
! Project/Site Name:	Section 32 Uranium Mine C	PRS WorkArea:	ASSESSMENT/INSPECTIONS ACTIVITIES
Project Address:		Activity:	Expanded Site Inspections/Remedial Investigation (ESI/RI)
County:	McKinley	Work Area Code:	
City, State:	, NM	Activity Code:	
Zip:		EMERGENCY CODE:	☐ KAT ☐ RIT
! SSID:	A6CD	FPN:	
CERCLIS:	NMN000607184	Performance Based:	No
Operable Unit:			
Authorized TDD Ce	iling:	Cost	Fee LOE
	Previous Action(s):	\$	0.00 0.0
	This Action:	\$26,66	1.00 0.0
	New Total:	\$26,66	1.00 0.0

Specific Elements

Description of Work:

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late into the 20th century. There are three mining sub-districts within the Grants Mining District: Ambrosia Lake, Laguna, and Marquez. Land ownership within these sub-districts consists of public, tribal and private property. These mining sub-districts contain 97 former legacy uranium mines and five mill sites. The EPA is currently assessing the mine sites for releases that may have impacted soil, surface water and groundwater. Under this TDD, the contractor shall investigate mine water discharge locations, sample potentially impacted soil for elevated concentrations of elemental uranium and radionuclides, sample any surface water present for metals and radionuclides, and sample any accessible groundwater wells in the immediate area of the Section 32 mine site in the Ambrosia Lake sub-district. The contractor shall document mine site features (e.g. open mine portals, waste rock piles, mine operation-related structures, etc.) and sample locations with photographs, descriptions, and geospatially. A draft and final report shall be written for the mine site. Coordinate with SAM, Lisa Price at price.lisa@epa.gov or 214-665-6744, upon receipt of the TDD.

Accounting	and A	opropriation	Information
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SFO: 22

Line	DCN	IFMS	Budget/ FY	Appropriati on Code	Budget Org Code	Program Element	Object Class	Site Project	Cost Org Code	Amount
1	ENC035	XXX	11	TCD	06S	302EC7C	2505	A6CDRP00	C001	\$26,661.00

Funding Summary:	Funding
Previous:	\$0.00
This Action:	\$26,661.00
Total:	\$26,661.00

Funding Category

Removal

Section

- Signed by Lisa Price/R6/USEPA/US on 09/22/2011 08:17:31 AM, according to Abel Farias/start6/rfw-

: Lisa Price Date: 09/22/2011

Phone #:

Project Officer Section - Signed by Cora Stanley/R6/USEPA/US on 09/28/2011 04:47:13 PM, according to A

Project Officer: Linda Carter Date: 09/28/2011

Contracting Officer Section - Signed by Cora Stanley/R6/USEPA/US on 09/28/2011 04:47:13 PM, according

Contracting Officer: Cora Stanley Date: 09/28/2011

Contractor Section - Signed by Robert Beck/start6/rfw-start/us on 09/29/2011 09:36:28 AM, according to

During the past three (3) calendar years has your company, or any of your employees that will

O Yes be working at this site, previously performed work at this site /facility?

Contractor Contact: Robert Beck Date: 09/29/2011

START3 Technical Direction Document

TDD #: TO-0035-11-09-03 Amendment#:A Contract: EP-W-06-042

Assessment/Inspection Activities -Enforcement Funds (0035) Weston Solutions, Inc.

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TDD Name:	Section 32 Uranium Mine ORS	! Period:	Base Period
! Purpose:	Amended SOW		
! Priority:	High	! Start Date:	09/30/2011
Overtime:	Yes	! Completion Date:	06/29/2012
! Funding Category:	Removal	Invoice Unit:	
! Project/Site Name:	Section 32 Uranium Mine ORS	WorkArea:	ASSESSMENT/INSPECTIONS ACTIVITIES
Project Address:		Activity:	Expanded Site Inspections/Remedial Investigation (ESI/RI)
County:	McKinley	Work Area Code:	
City, State:	, NM	Activity Code:	
Zip:		EMERGENCY CODE:	☐ KAT ☐ RIT
! SSID:	A6CD	FPN:	
CERCLIS:	NMN000607184	Performance Based:	No
Operable Unit:			
Authorized TDD Ce	eiling:	Cost/	Fee LOE (Hours)
	Previous Action(s):	\$26,66	1.00 0.0
	This Action:	\$	0.00
	New Total:	\$26.66	1.00

Specific Elements

Description of Work:

All activities performed in support of this TDD shall be in accordance with the contract and TO PWS.

Amendment A is to allow the contractor to pay the New Mexico State Land Office \$25.00 for access to the mine site. There is no increase in cost/fee.

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late into the 20th century. There are three mining sub-districts within the Grants Mining District: Ambrosia Lake, Laguna, and Marquez. Land ownership within these sub-districts consists of public, tribal and private property. These mining sub-districts contain 97 former legacy uranium mines and five mill sites. The EPA is currently assessing the mine sites for releases that may have impacted soil, surface water and groundwater. Under this TDD, the contractor shall investigate mine water discharge locations, sample potentially impacted soil for elevated concentrations of elemental uranium and radionuclides, sample any surface water present for metals and radionuclides, and sample any accessible groundwater wells in the immediate area of the Section 32 mine site in the Ambrosia Lake sub-district. The contractor shall document mine site features (e.g. open mine portals, waste rock piles, mine operation-related structures, etc.) and sample locations with photographs, descriptions, and geospatially. A draft and final report shall be written for the mine site. Coordinate with SAM, Lisa Price at price.lisa@epa.gov or 214-665-6744, upon receipt of

the TDD.

Accounting and Appropriation Information

SFO:

Line	DCN	IFMS	Budget/ FY	Appropriati on Code	Budget Org Code	Program Element	Object Class	Site Project	Cost Org Code	Amount
1										\$0.00

Funding Summary:	Funding
Previous:	\$26,661.00
This Action:	\$0.00
Total:	\$26,661.00

Funding Category Removal

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- Signed by Lisa Price/R6/USEPA/US on 10/18/2011 11:28:21 AM, according to Phyllis Caldwell/start6

: Lisa Price Date: 10/18/2011

Phone #:

Project Officer Section - Signed by Linda Carter/R6/USEPA/US on 10/20/2011 07:11:16 AM, according to Pt

Project Officer: Linda Carter Date: 10/19/2011

Contracting Officer Section - Signed by Cora Stanley/R6/USEPA/US on 10/19/2011 07:44:27 PM, according

Contracting Officer: Cora Stanley Date: 10/19/2011

Contractor Section

Contractor Contact: Date:

START3 Technical Direction Document

TDD #: TO-0035-11-09-03 Amendment#:B Contract: EP-W-06-042

Assessment/Inspection Activities -Enforcement Funds (0035) Weston Solutions, Inc.

= required field	☐ Moved To EAS		
TDD Name:	Section 32 Uranium Mine OR	S ! Period:	Base Period
! Purpose:	Set/Revise Expenditure Limit		
! Priority:	High	! Start Date:	09/30/2011
Overtime:	Yes	! Completion Date:	06/29/2012
! Funding Category:	Removal	Invoice Unit:	
! Project/Site Name:	Section 32 Uranium Mine OR	S WorkArea:	ASSESSMENT/INSPECTIONS ACTIVITIES
Project Address:		Activity	Expanded Site Inspections/Remedial Investigation (ESI/RI)
County:	McKinley	Work Area Code:	
City, State:	, NM	Activity Code:	
Zip:		EMERGENCY CODE:	☐ KAT ☐ RIT
! SSID:	A6CD	FPN	
CERCLIS:	NMN000607184	Performance Based:	No
Operable Unit:			
Authorized TDD Ce	eiling:	Cost	/Fee LOE (Hours)
	Previous Action(s):	\$26,66	1.00 0.0
	This Action:	(\$20,000	0.00)
	New Total:	\$6.66	1.00

Specific Elements

Description of Work:

All activities performed in support of this TDD shall be in accordance with the contract and TO PWS.

Amendment B is to sweep \$20,000 from this TDD and divide the dollars amongst the Sandstone, John Bully, Section 12 and Dysart#2 TDDs (\$5000 each). The contractor has not expended any dollars on this TDD.

Amendment A is to allow the contractor to pay the New Mexico State Land Office \$25.00 for access to the mine site. There is no increase in cost/fee.

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late into the 20th century. There are three mining sub-districts within the Grants Mining District: Ambrosia Lake, Laguna, and Marquez. Land ownership within these sub-districts consists of public, tribal and private property. These mining sub-districts contain 97 former legacy uranium mines and five mill sites. The EPA is currently assessing the mine sites for releases that may have impacted soil, surface water and groundwater. Under this TDD, the contractor shall investigate mine water discharge locations, sample potentially impacted soil for elevated concentrations of elemental uranium and radionuclides, sample any surface water present for metals and radionuclides, and sample any accessible groundwater wells in the immediate area of the Section 32 mine site in the Ambrosia Lake sub-district. The contractor shall document mine site features (e.g. open mine portals,

waste rock piles, mine operation-related structures, etc.) and sample locations with photographs, descriptions, and geospatially. A draft and final report shall be written for the mine site. Coordinate with SAM, Lisa Price at price.lisa@epa.gov or 214-665-6744, upon receipt of the TDD.

Accounting and Appropriation Information

SFO: 22

Line	DCN	IFMS	Budget/ FY	Appropriati on Code	Budget Org Code	Program Element	Object Class	Site Project	Cost Org Code	Amount
1	ENC035	XXX	11	TCD	06S	302EC7C	2505	A6CD00	C001	\$-20,000.00

Funding Summary:	Funding
Previous:	\$26,661.00
This Action:	\$-20,000.00
Total:	\$6,661.00

Funding Category
Removal
Enforcement DEOBS

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- Signed by Lisa Price/R6/USEPA/US on 12/12/2011 12:15:56 PM, according to Phyllis Caldwell/start6

: Lisa Price Date: 12/12/2011

Phone #:

Project Officer Section - Signed by Cora Stanley/R6/USEPA/US on 12/13/2011 03:50:47 PM, according to P

Project Officer: Linda Carter Date: 12/13/2011

Contracting Officer Section - Signed by Cora Stanley/R6/USEPA/US on 12/13/2011 03:50:47 PM, according

Contracting Officer: Cora Stanley Date: 12/13/2011

Contractor Section

Contractor Contact: Date:

START3 Technical Direction Document

TDD #: TO-0035-11-09-03 Amendment#:C Contract: EP-W-06-042

Assessment/Inspection Activities -Enforcement Funds (0035) Weston Solutions, Inc.

= required field			
TDD Name:	Section 32 Uranium M	Mine ORS ! Period:	Base Period
! Purpose:	Set/Revise Expenditu	re Limit	
! Priority:	High	! Start Date:	: 09/30/2011
Overtime:	Yes	! Completion Date:	: 06/29/2012
! Funding Category:	Removal	Invoice Unit:	
! Project/Site Name:	Section 32 Uranium N	Mine ORS WorkArea:	ASSESSMENT/INSPECTIONS ACTIVITIES
Project Address:		Activity:	Expanded Site Inspections/Remedial Investigation (ESI/RI)
County:	McKinley	Work Area Code:	:
City, State:	, NM	Activity Code:	
Zip:		EMERGENCY CODE:	: 🗌 KAT 🗌 RIT
! SSID:	A6CD	FPN:	:
CERCLIS:	NMN000607184	Performance Based:	: No
Operable Unit:			
Authorized TDD Ce	eiling:	Cost	/Fee LOE (Hours)
	Previous Action(s):	\$6,66	51.00 0.0
	This Action:	(\$2,110	0.85)
	New Total:	\$4.55	0.0

Specific Elements

Description of Work:

All activities performed in support of this TDD shall be in accordance with the contract and TO PWS.

Amendment C <u>decreases</u> the dollar amount for the TDD by \$2110.85 per contractor's email dated 6/25/2012 and funding chart.

Amendment B is to sweep \$20,000 from this TDD and divide the dollars amongst the Sandstone, John Bully, Section 12 and Dysart#2 TDDs (\$5000 each). The contractor has not expended any dollars on this TDD.

Amendment A is to allow the contractor to pay the New Mexico State Land Office \$25.00 for access to the mine site. There is no increase in cost/fee.

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late into the 20th century. There are three mining sub-districts within the Grants Mining District: Ambrosia Lake, Laguna, and Marquez. Land ownership within these sub-districts consists of public, tribal and private property. These mining sub-districts contain 97 former legacy uranium mines and five mill sites. The EPA is currently assessing the mine sites for releases that may have impacted soil, surface water and groundwater. Under this TDD, the contractor shall investigate mine water discharge locations, sample potentially impacted soil for elevated concentrations of elemental uranium and radionuclides, sample any surface water present for metals and radionuclides, and sample any

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Accounting and Appropriation Information

SFO: 22

Line	DCN	IFMS	Budget/ FY	Appropriati on Code	Budget Org Code	Program Element	Object Class	Site Project	Cost Org Code	Amount
1	ENC035	XXX	11	TCD	06S	302EC7C	2505	A6CDRP00	C001	\$-2,110.85

Funding Summary:	Funding
Previous:	\$6,661.00
This Action:	\$-2,110.85
Total:	\$4,550.15

Funding Category
Removal

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: Lisa Price by Linda Carter Date: 06/26/2012

Phone #

Project Officer Section - Signed by Cora Stanley/R6/USEPA/US on 06/26/2012 02:50:43 PM, according to C

Project Officer: Linda Carter Date: 06/26/2012

Contracting Officer Section - Signed by Cora Stanley/R6/USEPA/US on 06/26/2012 02:50:43 PM, according

Contracting Officer: Cora Stanley Date: 06/26/2012

Contractor Section

Contractor Contact: Date: